CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.06/TBMK/WMM/Gradation/2014-15 05.09.2014

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

Agency : **Mr. T.B. Mahesh Kumar,** Contractor, Bangalore.

Name of Work : Improvements to Road and Drains at Saraipalya Layout in Ward No.06, Byatarayanapura Sub Division, BBMP, Bangalore.

Reference : AEE/BTP/WO/62/2014-15 Dated: 03.09.2014

Date of Testing : 05.09.2014

Material : WMM

Sample Location : WMM Mix Plant Oven Dry Wt (gm): 25200

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	895	895	3.6	96.4	95-100
22.4	5420	6315	25.1	74.9	60-80
11.2	5560	11875	47.1	52.9	40-60
4.75	4015	15890	63.1	36.9	25-40
2.36	3860	19750	78.4	21.6	15-30
0.600	2490	22240	88.3	11.7	8-22
0.075	2575	24815	98.5	1.5	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

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Job No.: CTCE/BBMP/W.No.06/TBMK/SDBC/Bitumen/2014-15 15.09.2014

BITUMEN CONTENT AND GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

As per IS2386 and IRC:SP:11-1984

CLIENT	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
AGENCY	**Mr. T.B. Mahesh Kumar,** Contractor, Bangalore.
NAME OF THE WORK	Improvements to Road and Drains at Saraipalya Layout in Ward No.06, Byatarayanapura Sub Division, BBMP, Bangalore.
REFERENCE	AEE/BTP/WO/62/2014-15 Dated: 03.09.2014
SAMPLE I/D	Roads and Drains at Saraipalya Main Road and Cross Roads in Ward No.06.
DATE OF TESTING	15.09.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	477	472
3. Weight of Asphalt and Mineral matter Extracted,	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	23	28.00
7. Bitumen content in %	4.60	5.60
8. Average	**5.10**	

GRADATION AFTER EXTRACTION

SIEVE SIZE	Trail 1				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	34.12	7.15	7.15	92.85	90-100
4.75	262.3	54.99	62.14	37.86	35-51
2.36	51.14	10.72	72.86	27.14	24-39
1.18	42.25	8.86	81.72	18.28	15-30
0.3	29.65	6.22	87.94	12.06	9-19
0.075	22.25	4.66	92.60	7.40	3-8

SIEVE SIZE	Trail 2				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	27.4	5.48	5.48	94.52	90-100
4.75	259.6	51.92	57.40	42.60	35-51
2.36	85.42	17.08	74.48	25.52	24-39
1.18	47.28	9.46	83.94	16.06	15-30
0.3	25.48	5.10	89.04	10.96	9-19
0.075	20.78	4.16	93.19	6.81	3-8

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